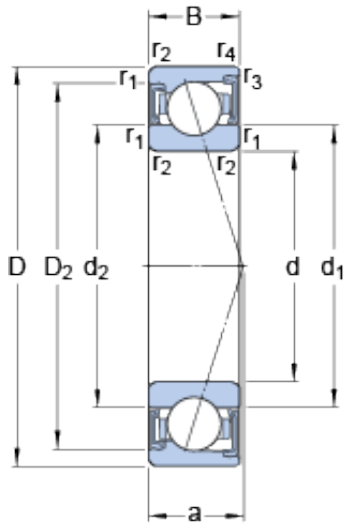




## BEARING DRIVESHAFT, INC.



S7020 ACD/HCP4A Bearing 2D drawings and 3D CAD models

100 mm x 150 mm x 24 mm SKF S7020  
ACD/HCP4A angular contact ball bearings

Bearing No. S7020 ACD/HCP4A

Size	150x100x24 mm
Bore Diameter	150 mm
Outer Diameter	100 mm
Width	24 mm
d	100 mm
D	150 mm
B	24 mm
d <sub>1</sub>	115.4 mm
d <sub>2</sub>	115.4 mm
D <sub>2</sub>	138.17 mm
r <sub>1,2</sub> - min.	1.5 mm
r <sub>3,4</sub> - min.	1 mm
a	41.3 mm
d <sub>a</sub> - min.	107 mm
d <sub>a</sub> - max.	114.8 mm
d <sub>b</sub> - min.	107 mm
d <sub>b</sub> - max.	114.8 mm
D <sub>a</sub> - max.	143 mm
D <sub>b</sub> - max.	146 mm
r <sub>a</sub> - max.	1.5 mm
r <sub>b</sub> - max.	1 mm
Basic dynamic load rating - C	79.3 kN
Basic static load rating - C <sub>0</sub>	80 kN
Fatigue load limit - P <sub>u</sub>	3 kN



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Limiting speed for grease lubrication	9500 r/min
Ball - $D_w$	15.875 mm
Ball - $z$	22
Calculation factor - $e$	0.68
Calculation factor - $Y_2$	0.87
Calculation factor - $Y_0$	0.38
Calculation factor - $X_2$	0.41
Calculation factor - $Y_1$	0.92
Calculation factor - $Y_2$	1.41
Calculation factor - $Y_0$	0.76
Calculation factor - $X_2$	0.67
Preload class A - $G_A$	500 N
Preload class B - $G_B$	1000 N
Preload class C - $G_C$	2000 N
Preload class D - $G_D$	4000 N
Calculation factor - $f$	1.16
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2D}$	1.08
Calculation factor - $f_{HC}$	1.02
Preload class A	300 N/micron
Preload class B	394 N/micron
Preload class C	524 N/micron
Preload class D	710 N/micron
$d_1$	115.4 mm
$d_2$	115.4 mm
$D_2$	138.17 mm



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$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	1 mm
$d_a$ min.	107 mm
$d_a$ max.	114.8 mm
$d_b$ min.	107 mm
$d_b$ max.	114.8 mm
$D_a$ max.	143 mm
$D_b$ max.	146 mm
$r_a$ max.	1.5 mm
$r_b$ max.	1 mm
Basic dynamic load rating C	79.3 kN
Basic static load rating $C_0$	80 kN
Fatigue load limit $P_u$	3.05 kN
Attainable speed for grease lubrication	9500 r/min
Ball diameter $D_w$	15.875 mm
Number of balls z	22
Preload class A $G_A$	500 N
Static axial stiffness, preload class A	300 N/ $\mu$ m
Preload class B $G_B$	1000 N
Static axial stiffness, preload class B	394 N/ $\mu$ m
Preload class C $G_C$	2000 N
Static axial stiffness, preload class C	524 N/ $\mu$ m
Preload class D $G_D$	4000 N
Static axial stiffness, preload class D	710 N/ $\mu$ m
Calculation factor f	1.16
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05



## BEARING DRIVESHAFT, INC.

Calculation factor $f_{2D}$	1.08
Calculation factor $f_{HC}$	1.02
Calculation factor $e$	0.68
Calculation factor (single, tandem) $Y_2$	0.87
Calculation factor (single, tandem) $Y_0$	0.38
Calculation factor (single, tandem) $X_2$	0.41
Calculation factor (back-to-back, face-to-face) $Y_1$	0.92
Calculation factor (back-to-back, face-to-face) $Y_2$	1.41
Calculation factor (back-to-back, face-to-face) $Y_0$	0.76
Calculation factor (back-to-back, face-to-face) $X_2$	0.67
Mass bearing	1.06 kg